



PTO/SB/21 (09-04)

**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/627,507
Filing Date	July 25, 2003
First Named Inventor	Kenji Yamagami
Art Unit	2163
Examiner Name	Patrick A. Darno
Attorney Docket Number	16869B-082900US

**ENCLOSURES (Check all that apply)**

- |  |   |  |
|--|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Reply to Missing Parts/ Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br>Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>USPTO forms SB08A&B, copies of 14 cited references, Return Postcard |
|--|---|--|

Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.
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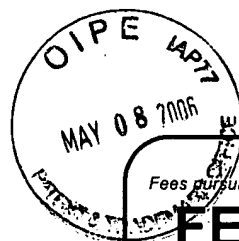
**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	Townsend and Townsend and Crew LLP		
Signature			
Printed name	George B. F. Yee		
Date	5/2 2006	Reg. No.	37,478

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature			
Typed or printed name	Roger Layton	Date	5/3/06



Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

**FEE TRANSMITTAL**  
**For FY 2006**☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$ ) 180**Complete if Known**

Application Number	10/627,507
Filing Date	July 25, 2003
First Named Inventor	Kenji Yamagami
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Art Unit	2163
Attorney Docket No.	16869B-082900US

**METHOD OF PAYMENT** (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_

☒ Deposit Account Deposit Account Number: 20-1430 Deposit Account Name: Townsend and Townsend and Crew LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION** (All the fees below are due upon filing or may be subject to a surcharge.)**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Small Entity	Small Entity	Small Entity	Small Entity	Small Entity	Small Entity	
	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES****Fee Description**

Each claim over 20 (including Reissues)

Each independent claim over 3 (including Reissues)

Multiple dependent claims

	Small Entity
Fee (\$)	Fee (\$)
50	25
200	100
360	180
Multiple Dependent Claims	
Fee (\$)	Fee Paid (\$)

**Total Claims** **Extra Claims** **Fee (\$)** **Fee Paid (\$)**

-20 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of total claims paid for, if greater than 20

**Indep. Claims** **Extra Claims** **Fee (\$)** **Fee Paid (\$)**

-3 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of independent claims paid for, if greater than 3

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	_____	_____	_____	_____

- 100 = \_\_\_\_\_ / 50 = \_\_\_\_\_ (round up to a whole number) x \_\_\_\_\_ = \_\_\_\_\_

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Submission of Information Disclosure Stmt

180

**SUBMITTED BY**

Signature		Registration No. (Attorney/Agent) 37,478	Telephone 650-326-2400
Name (Print/Type)	George B. F. Yee		Date 5/2 2006

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

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P.O. Box 1450  
Alexandria, VA 22313-1450

On MAY 3, 2006

TOWNSEND and TOWNSEND and CREW LLP

By:   
Roger P. Lyon



PATENT  
Attorney Docket No.: 16869B-082900US  
Client Reference No.: HAL 281

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Kenji Yamagami

Application No.: 10/627,507

Filed: July 25, 2003

For: METHOD AND APPARATUS FOR  
SYNCHRONIZING APPLICATIONS  
FOR DATA RECOVERY USING  
STORAGE BASED JOURNALING

Confirmation No.: 3250

Examiner: Patrick A. Darno

Art Unit: 2163

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER  
37 CFR §1.97 and §1.98

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the cited foreign-patent and non-patent references are enclosed. Examiner please note that cited reference 60, US Pat. Application 09588242 filed June 6, 2000, is unpublished and is not enclosed, however, it should be available to the examiner through the USPTO PALM or PAIR databases.

05/09/2006 ZJUHA1 00000051 201430 10627507  
01 FC:1806 180.00 DA

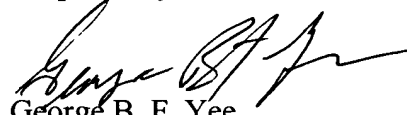
It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

  
George B. F. Yee  
Reg. No. 37,478

TOWNSEND and TOWNSEND and CREW LLP  
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GBFY:rmh



<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<b>Complete if Known</b>			
		Application Number	10/627,507		
		Filing Date	July 25, 2003		
		First Named Inventor	Kenji Yamagami		
		Art Unit	2163		
		Examiner Name	Patrick A. Darno		
Sheet	1	of	4	Attorney Docket Number	16869B-082900US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number <small>Number Kind Code<sup>2</sup> (if known)</small>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-6,981,114	12-27-2005	Wu et al.	
	2	US-6,978,282	12-20-2005	Dings et al.	
	3	US-2005/0256811	11-17-2005	Pagel et al.	
	4	US-6,915,315	07-05-2005	Autrey et al.	
	5	US-2005/0108302	05-19-2005	Rand et al.	
	6	US-2005/0039069	02-17-2005	Prahlad et al.	
	7	US-2005/0027892	02-03-2005	McCabe et al.	
	8	US-6,839,819	01-04-2005	Martin	
	9	US-6,829,819	12-14-2004	Crue et al.	
	10	US-2004/0250033	12-09-2004	Prahlad et al.	
	11	US-2004/0250182	12-09-2004	Lyle et al.	
	12	US-2004/0225689	11-11-2004	Dettinger et al.	
	13	US-6,816,872	11-09-2004	Squibb	
	14	US-2004/0172577	09-02-2004	Tan et al.	
	15	US-2004/0163009	08-19-2004	Goldstein et al.	
	16	US-2004/0153558	08-05-2004	Gunduc et al.	
	17	US-2004/0133575	07-08-2004	Farmer et al.	
	18	US-2004/0128470	07-01-2004	Hetzler et al.	
	19	US-2004/0117572	06-17-2004	Welsh et al.	
	20	US-6,742,138	05-25-2004	Gagne et al.	
	21	US-2004/0088508	05-06-2004	Ballard et al.	
	22	US-6,728,747	04-27-2004	Jenkins et al.	
	23	US-2004/0068636	04-08-2004	Jacobson et al.	
	24	US-2004/0059882	03-25-2004	Kedem et al.	
	25	US-6,711,409	03-23-2004	Zavgren et al.	
	26	US-6,711,572	03-23-2004	Zakharov et al.	
	27	US-2004/0044828	03-04-2004	Gibble et al.	
	28	US-2004/0030837	02-12-2004	Geiner et al.	
	29	US-6,691,245	02-10-2004	DeKoning	
	30	US-2004/0010487	01-15-2004	Prahlad et al.	
	31	US-6,665,815	12-16-2003	Goldstein et al.	
	32	US-2003/0229764	12-11-2003	Ohno et al.	
	33	US-6,658,434	12-02-2003	Watanabe et al.	
	34	US-2003/0220935	11-27-2003	Vivian et al.	
	35	US-2003/0195903	10-16-2003	Manley et al.	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/627,507
				Filing Date	July 25, 2003
				First Named Inventor	Kenji Yamagami
				Art Unit	2163
				Examiner Name	Patrick A. Damo
Sheet	2	of	4	Attorney Docket Number	16869B-082900US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	36	US-2003/0177306	09-18-2003	Cochrane et al.	
	37	US-2003/0135650	07-17-2003	Kano et al.	
	38	US-6,594,781	07-15-2003	Komasaka et al.	
	39	US-6,587,970	07-01-2003	Wang et al.	
	40	US-2003/0115225	06-19-2003	Suzuki et al.	
	41	US-6,560,614	05-06-2003	Barboy et al.	
	42	US-2003/0074523	04-17-2003	Johnson	
	43	US-6,539,462	03-25-2003	Mikkelsen et al.	
	44	US-6,473,775	10-29-2002	Kusters et al.	
	45	US-6,442,706	08-27-2002	Wahl et al.	
	46	US-2002/0078244	06-20-2002	Howard	
	47	US-6,353,878	03-05-2002	Dunham	
	48	US-2002/0016827	02-07-2002	McCabe et al.	
	49	US-2001/0056438	12-27-2001	Ito	
	50	US-2001/0049749	12-06-2001	Katsuragi et al.	
	51	US-6,324,654	11-27-2001	Wahl et al.	
	52	US-6,298,345	10-02-2001	Armstrong et al.	
	53	US-6,269,381	07-31-2001	St. Pierre et al.	
	54	US-6,269,431	07-31-2001	Dunham	
	55	US-2001/0010070	07-26-2001	Crockett et al.	
	56	US-6,189,016	02-13-2001	Carbrera et al.	
	57	US-6,154,852	11-28-2000	Amundson et al.	
	58	US-6,128,630	10-03-2000	Shackelford	
	59	US-6,081,875	06-27-2000	Clifton et al.	
	60	US-09/588242	06-06-2000	Poston	unpublished application
	61	US-5,987,575	11-16-1999	Yamaguchi	
	62	US-5,870,758	02-09-1999	Bamford et al.	
	63	US-5,867,668	02-02-1999	Spirakis et al.	
	64	US-5,835,953	11-10-1998	Ohran	
	65	US-5,751,997	05-12-1998	Kullick et al.	
	66	US-5,720,029	02-17-1998	Kern et al.	
	67	US-5,701,480	12-23-1997	Raz	
	68	US-5,680,640	10-21-1997	Ofek et al.	
	69	US-5,664,186	09-02-1997	Bennett et al.	
	70	US-5,644,696	07-01-1997	Pearson et al.	

Examiner Signature	Date Considered
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Sheet	3	of	4		

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		Number Kind Code <sup>2</sup> (if known)			
	71	US-5,555,371	09-10-1996	Duyanovich et al.	
	72	US-5,551,003	08-27-1996	Mattson et al.	
	73	US-5,479,654	12-26-1995	Squibb	
	74	US-5,369,757	11-29-1994	Spiro et al.	
	75	US-5,263,154	11-16-1993	Eastridge et al.	
	76	US-5,065,311	11-12-1991	Masai et al.	
	77	US-4,823,261	04-18-1989	Bank et al.	
	78	US-4,077,059	02-28-1978	Cordi et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	79	PCT	WO03/092166		11-06-2003	Kashya Israel Ltd.		
	80	JP	2000-155708	A	06-06-2000	NEC Corp.		abstract only
	81	JP	11-353215	A	12-24-1999	NEC Corp.		abstract only
	82	JP	05-002517	A	01-08-1993	NEC Corp.		abstract only
	83	JP	03-103941	A	04-30-1991	NEC Corp.		abstract only

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				First Named Inventor	Kenji Yamagami
				Art Unit	2163
				Examiner Name	Patrick A. Damo
Sheet	4	of	4	Attorney Docket Number	16869B-082900US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	84	"Making ROI a Snap: Leveraging the Power of Snapshot Technology with ComVault TM, QiNetix TM, Quick Recovery," CommVault Systems, Inc. Oceanport, NJ (2002).	<input type="checkbox"/>
	85	"QiNetix Quick Recovery: Snapshot Management and Recovery," CommVault Systems, Inc. Oceanport, NJ (2005).	<input type="checkbox"/>
	86	"QiNetix: Quick Recovery for Microsoft Exchange," CommVault Systems, Inc. Oceanport, NJ (2003).	<input type="checkbox"/>
	87	BOHANNON et al. "Distributed Multi-Level Recovery in Main-Memory Databases," Proceedings of the 4th International Conference on Parallel and Distributed Information Systems, pp. 45-55 (1996).	<input type="checkbox"/>
	88	ELNOZAHY et al "A Survey of Rollback-Recovery Protocols in Message-Passing Systems," ACM Computing Surveys 34:375-408 (Sept 2002).	<input type="checkbox"/>
	89	HUNNICUTT et al, "Mission Data Storage Consolidation (MDSC)," Space Ops 2002 Conference, Paper ID: T2071 (2002).	<input type="checkbox"/>
	90	LOMET et al "Efficient Transparent Application Recovery in Client-Server Information Systems," Proceedings of 1998 ACM SIGMOD International Conference on Management of Data, pp. 460-471 (1998).	<input type="checkbox"/>
	91	PARK et al "An Efficient Recovery Scheme for Mobile Computing Environments," Proceedings of the 8th International Conference on Parallel and Distributed Systems (2001).	<input type="checkbox"/>
	92	THATTE "Persistent Memory: A Storage Architecture for Object-Oriented Database Systems," Proceedings of the ACM/IEEE International Workshop on Object-Oriented Database Systems, Pacific Grove, CA, pp. 148-159 (1986).	<input type="checkbox"/>

Examiner Signature		Date Considered	
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